(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date 18 December 2003 (18.12.2003)

PCT

(10) International Publication Number WO 03/104832 A1

(51) International Patent Classification7: G01R 33/561

(21) International Application Number: PCT/IB03/02162

(22) International Filing Date: 21 May 2003 (21.05.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 02077260.4 10 June 2002 (10.06.2002) EI

(71) Applicant (for all designated States except US): KONIN-KLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): KOUWENHOVEN, Marc [NL/NL]; c/o Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).

(74) Agent: COHEN, Julius, S.; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: MAGNETIC RESONANCE IMAGING METHOD

(57) Abstract: A magnetic resonance imaging method for forming an image of an object from a plurality of signals acquired by an array of multiple receiver antennae, wherein spins are excited in a part of the object. Slices (22) are selected with a predetermined Field-of-View for scanning the object and are rotated uniformly over a predetermined angle. MR signals are measured along a predetermined trajectory containing a plurality of lines said slices in k-space by application of a read gradient and other gradients. Further the slices (24) are shifted in lengthwise direction obtaining a staggered arrangement such that the beginning and the end of each of said slices are at least approximately within the area covered by the slices before rotation.

WO 03/104832